





# Work Order ID 51822

September 4, 2009 8:39:38 AM

Page 1

|                |                                |            |        |   |               |       |   |
|----------------|--------------------------------|------------|--------|---|---------------|-------|---|
| Item ID:       | D3847-049                      | GY         | Accept |  | Setup         | Start |  |
| Revision ID:   | B                              |            |        |   |               | Stop  |  |
| Item Name:     | AFT WEARPLATE ASSY, FLOAT GEAR |            |        |   |               |       |   |
| Start Date:    | 09/04/2009                     | Start Qty: | 2.00   |    | Cust Item ID: |       |   |
| Required Date: | 09/11/2009                     | Req'd Qty: | 2.00   |    | Customer:     |       |   |
| Reference:     |                                |            |        |   |               |       |   |

|            |               |    |       |          |            |  |       |  |     |       |   |
|------------|---------------|----|-------|----------|------------|--|-------|--|-----|-------|---|
| Approvals: | Process Plan: | ME | Date: | 09-09-04 | Tooling:   |  | Date: |  | Run | Start |  |
|            | QC:           |    | Date: |          | SPC (Y/N): |  | Date: |  |     | Stop  |  |

| Sequence ID/<br>Work Center ID   | Operation<br>Description                | Set Up/<br>Run Hours | Draw<br>Number | Draw<br>Rev. | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--|---|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|
| <b>Draw Nbr</b>  | <b>Revision Nbr</b>                     |                      |                |              |              |               |               |                  |                |
| D3847  | B                                       |                      |                |              |              |               |               |                  |                |
| 100  |   | 0.00                 |                |              |              |               |               |                  |                |
|    |   |                      |                |              |              |               |               |                  |                |
| Waterjet   |   | 0.00                 |                |              |              |               |               |                  |                |
| FLOW CNC Waterjet  | 364<br>- 050                            |                      |                |              |              |               |               |                  |                |
|  | Memo                                    |                      |                |              |              |               |               |                  |                |
|  | 1-Cut as per Dwg D3847                  |                      |                |              |              |               |               |                  |                |
|  | Dwg Rev: B                              |                      |                |              |              |               |               |                  |                |
|  | Prog Rev: B                             |                      |                |              |              |               |               |                  |                |
|  | 2-Deburr if necessary                   |                      |                |              |              |               |               |                  |                |
| 110  | QC2- Inspect parts off machine FAI/FAIB | 0.00                 |                |              |              |               |               |                  |                |
|  |   |                      |                |              |              |               |               |                  |                |
| QC   |   | 0.00                 |                |              |              |               |               |                  |                |
| Quality Control  | Memo                                    |                      |                |              |              |               |               |                  |                |

18 9-9-04

18 9-9-04

6

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |






**NOTE:** Date & initial all entries



**Work Order ID 51822**




September 4, 2009 8:39:38 AM



Page 2

Item ID: D3847-049      Accept            Setup      Start        
Revision ID: B  
Item Name: AFT WEARPLATE ASSY, FLOAT GEAR      Stop        
Start Date: 09/04/2009      Start Qty: 2.00            Cust Item ID:  
Required Date: 09/11/2009      Req'd Qty: 2.00            Customer:  
Reference:

Approvals:      Process Plan: \_\_\_\_\_      Date: \_\_\_\_\_      Tooling: \_\_\_\_\_      Date: \_\_\_\_\_      Run      Start        
                 QC: \_\_\_\_\_      Date: \_\_\_\_\_      SPC (Y/N): \_\_\_\_\_      Date: \_\_\_\_\_      Stop      

| Sequence ID/<br>Work Center ID  | Operation<br>Description                                  | Set Up/<br>Run Hours | Draw<br>Number | Draw<br>Rev. | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|---|---|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|
| 120<br><br>QC<br>Quality Control   | QC8- Inspect parts - second check<br><br>Memo             | 0.00<br>0.00         | ⇒ S 02/01/25   |              |              | (46)          | 6             |                  |                |
| 130<br><br>Brake NC<br>Brake NC  | Memo<br>form as per dwg D3847                             | 0.00<br>0.00         | 8/8 09/09/28   |              |              | 6             | 0             |                  |                |
| 140<br><br>QC<br>Quality Control | QC5- Inspect part completeness to step on W/O<br><br>Memo | 0.00<br>0.00         | ⇒ S 02/05/28   |              |              | (46)          | 6             |                  |                |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |






**NOTE:** Date & initial all entries



# Work Order ID 51822




September 4, 2009 8:39:38 AM



Page 3

Item ID: D3847-049 Accept  Setup Start   
Revision ID: B Stop   
Item Name: AFT WEARPLATE ASSY, FLOAT GEAR  
Start Date: 09/04/2009 Start Qty: 2.00  Cust Item ID:  
Required Date: 09/11/2009 Req'd Qty: 2.00  Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start   
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop 

| Sequence ID/<br>Work Center ID  | Operation<br>Description  | Set Up/<br>Run Hours | Draw<br>Number | Draw<br>Rev. | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp             |
|---|---|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------------------|
| 150<br><br>Powdercoat<br>Powder Coating | Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3<br>Memo 1109091<br>START 9:00AM<br>TEMP: 320°F<br>FIN: 9:30AM                                    | 0.00<br>0.00         |                |              |              | X6            | 8             |                  |                            |
| 160<br><br>QC<br>Quality Control        | QC3- Inspect Part Finish<br>Memo BL 0909-29   | 0.00<br>0.00         |                |              |              | 6             |               |                  |                            |
| 170<br><br>Small Fab<br>Small Fab     | 1- Bond gasket to inner surface of wearplate using a thin layer of 3m 1300/1300L scotch grip adhesive as per dwg D3847<br>BATCH: M 111428 | 0.00<br>0.00         |                |              |              |               |               |                  | Ep 09/10/13<br>JD 09/10/13 |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Work Order ID 51822

September 4, 2009 8:39:38 AM



Page 4

Item ID: D3847-049

Accept



Setup Start



Revision ID: B

Stop



Item Name: AFT WEARPLATE ASSY, FLOAT GEAR

Start Date: 09/04/2009 Start Qty: 2.00



Cust Item ID:

Required Date: 09/11/2009 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



| Sequence ID/<br>Work Center ID    | Operation<br>Description                                  | Set Up/<br>Run Hours | Draw<br>Number | Draw<br>Rev. | Plan<br>Code | Accept<br>Qty           | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|-----------------------------------|---|----------------------|----------------|--------------|--------------|-------------------------|---------------|------------------|----------------|
| 180<br><br>QC<br>Quality Control  | QC5- Inspect part completeness to step on W/O<br><br>Memo | 0.00<br><br>0.00     | 2) 507/10/13   |              |              | (+6)                    | 4             |                  |                |
| 190<br><br>Packaging<br>Packaging | Identify as per dwg & Stock Location: _____<br><br>Memo   | 0.00<br><br>0.00     |                |              |              | Pug 10/13 (6)           |               |                  |                |
| 200<br><br>QC<br>Quality Control  | QC21- Final Inspection - Work Order Release<br><br>Memo   | 0.00<br><br>0.00     |                |              |              | 09/10/14<br>PL 09-10-14 |               |                  |                |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



# Picklist Print

September 4, 2009 8:39:38 AM

Page 1

Work Order ID: 51822

Parent Item: D3847-049RevB

Parent Item Name: AFT WEARPLATE ASSY, FLOAT GEAR



Start Date: 09/04/2009

Required Date: 09/11/2009

Comments:

Start Qty: 2.00

Required Qty: 2.00

| Component Item ID/<br>Item Name  | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Remaining<br>Qty To Pick | Qty<br>Issued | Date<br>Issued | Status      |
|--|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|-------------|
| D3846-9RevB<br>         |                        | Manufactured  | No          |                     |                  |                 | Each               | 0.0000         | 2.0000                   | 10.4841       | ⑥              | 9/30/10/13  |
| Gasket<br>M304S18GA<br> |                        | Purchased     | No          |                     |                  |                 | sf                 | 183.4395       | 3.4947                   | 351830        |                | 352679 (2x) |
| 304/316 .050 Sheet   |                        |               |             |                     |                  |                 |                    |                |                          |               |                | 13 9-9-17   |

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

MAT

183.4395053

108156

0.98526316

111743

23.7174

112178

158.736842

112178

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

|   |  |                     |           |
|---|--|---------------------|-----------|
| <b>DART AEROSPACE LTD</b>                           |  | <b>Work Order:</b>  | S1822     |
| <b>Description:</b> AFT WEAR PLATE ASSY. FLOAT GEAR |  | <b>Part Number:</b> | D3847-049 |
| <b>Inspection Dwg:</b> D3847-9 <b>Rev:</b> B        |  | Page 1 of 1         |           |

### FIRST ARTICLE INSPECTION CHECKLIST

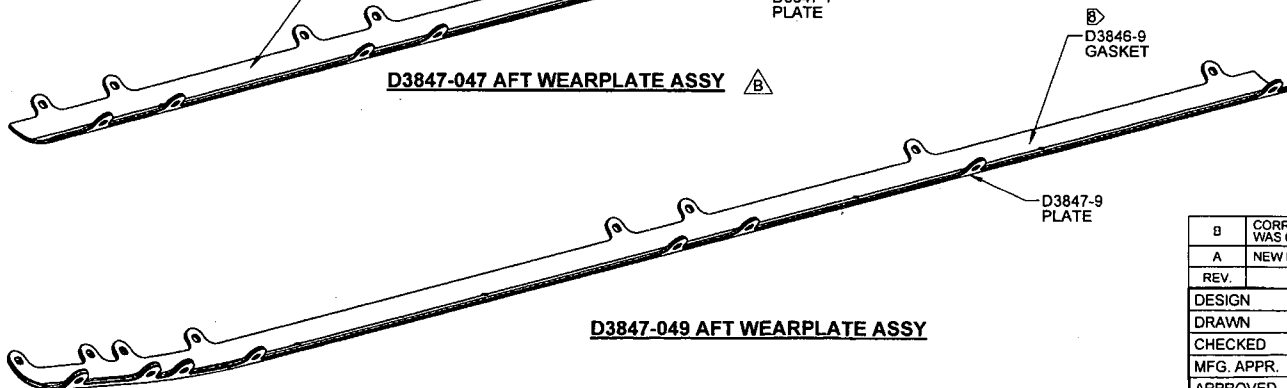
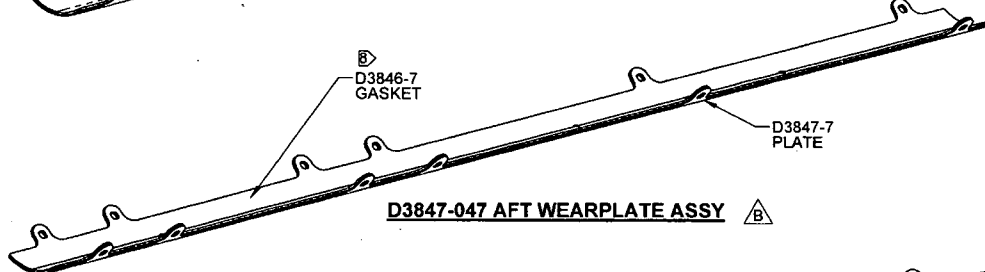
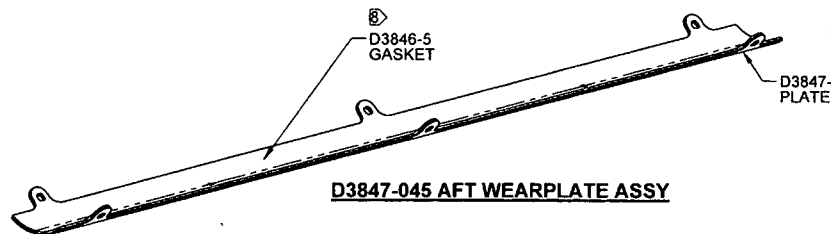
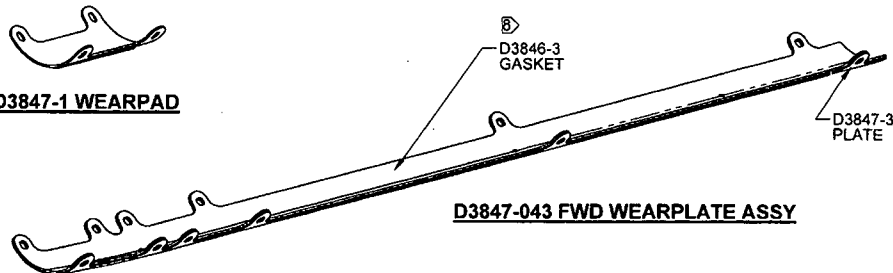
☒ First Article ☐ Prototype

| Drawing Dimension | Tolerance     | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|---------------|------------------|--------|--------|----------------------|----------|
| .300              | ± .010        | .363             | *      |        |                      |          |
| .300              | ± .010        | .306             | *      |        |                      |          |
| Ø .188            | + .005 - .001 | .192             | *      |        |                      |          |
| .75               | ± .030        | .751             | *      |        |                      |          |
| 2.45              | ± .030        | 2.447            | *      |        |                      |          |
| 3.280             | ± .010        | 3.278            | *      |        |                      |          |
| 1.69              | ± .030        | 1.690            | *      |        |                      |          |
| 4.13              | ± .030        | 4.124            | *      |        |                      |          |
| 11.50             | ± .030        | 11.50            | *      |        |                      |          |
| 9.000             | ± .010        | 9.00             | *      |        |                      |          |
| 18.000            | ± .010        | 18.00            | *      |        |                      |          |
| 27.000            | ± .010        | 27.00            | *      |        |                      |          |
| 36.000            | ± .010        | 36.00            | *      |        |                      |          |
| 60.00             | ± .030        | 60.00            | *      |        |                      |          |
| 14.490            | ± .010        | 14.490           | *      |        |                      |          |
| 25.480            | ± .010        | 25.480           | *      |        |                      |          |
| 28.980            | ± .010        | 28.980           | *      |        |                      |          |
| 49.322            | ± .010        | 49.322           | *      |        |                      |          |
| 52.822            | ± .010        | 52.822           | *      |        |                      |          |
| 54.438            | ± .010        | 54.438           | x      |        |                      |          |
| 57.938            | ± .010        | 57.938           | x      |        |                      |          |
| .050              | ± .010        | .047             | x      |        |                      |          |

|                     |        |                    |          |                            |     |
|---------------------|--------|--------------------|----------|----------------------------|-----|
| <b>Measured by:</b> | LB     | <b>Audited by:</b> | J        | <b>Prototype Approval:</b> | N/A |
| <b>Date:</b>        | 9-9-24 | <b>Date:</b>       | 09/09/25 | <b>Date:</b>               | N/A |

| Rev | Date | Change    | Revised by | Approved |
|-----|------|-----------|------------|----------|
| A   |      | New Issue | KJ/JLM     |          |

**D3847-1 WEARPAD**



| ITEM | QTY -043 | QTY -045 | QTY -047 | QTY -049 | P/N             | DESCRIPTION                           |
|------|----------|----------|----------|----------|-----------------|---------------------------------------|
| 1    | X        |          |          |          | D3847-043       | FWD WEARPLATE ASSY, STD/FLOAT GEAR    |
| 2    |          | X        |          |          | D3847-045       | CENTER WEARPLATE ASSY, STD/FLOAT GEAR |
| 3    |          |          | X        |          | D3847-047       | AFT WEARPLATE ASSY, STD GEAR          |
| 4    |          |          |          | X        | D3847-049       | AFT WEARPLATE ASSY, FLOAT GEAR        |
| 11   | 1        |          |          |          | D3847-3         | PLATE                                 |
| 12   |          | 1        |          |          | D3847-5         | PLATE                                 |
| 13   |          |          | 1        |          | D3847-7         | PLATE                                 |
| 14   |          |          |          | 1        | D3847-9         | PLATE                                 |
| 15   | 1        |          |          |          | D3846-3         | GASKET                                |
| 16   |          | 1        |          |          | D3846-5         | GASKET                                |
| 17   |          |          | 1        |          | D3846-7         | GASKET                                |
| 18   |          |          |          | 1        | D3846-9         | GASKET                                |
|      | A/R      | A/R      | A/R      | A/R      | 1300 (OR 1300L) | 3M SCOTCH-GRIP ADHESIVE               |

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 51822  
MF 09-09-04

- NOTES:  
1) MATERIAL: N/A  
2) FINISH: NONE  
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) UNITS: INCHES UNLESS OTHERWISE NOTED  
5) BREAK SHARP EDGES: N/A  
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3847-XXX" USING YELLOW PAINT MARKER AT INSIDE SURFACE  
7) WEIGHT: D3847-043 = 1.71 lbs  
D3847-045 = 1.49 lbs  
D3847-047 = 2.00 lbs  
D3847-049 = 4.21 lbs  
8) BOND D3846-X GASKET TO INNER SURFACE OF WEARPLATE USING A THIN LAYER OF 3M 1300/1300L SCOTCH GRIP ADHESIVE

**D3847-11 WEARPAD**

RELEASED  
09/07/15 MB

|            |   |   |              |
|------------|---|---|--------------|
| B          | CORRECT TYPO D3847-047 WAS D3847-045. ZN B5-1: 5.82 WAS 6.25 (ZN A4-2); 43.28 WAS 45.71 (ZN B4-5) | RF  | 09.06.30     |
| A          | NEW ISSUE   | RF  | 09.03.30     |
| REV.       | DESCRIPTION   | BY  | DATE         |
| DESIGN     | RF  | <b>DART AEROSPACE USA, INC.</b><br>PORT HADLOCK, WA   |              |
| DRAWN      | RF  | DRAWING NO.   | REV. B       |
| CHECKED    | RF  | D3847   | SHEET 1 OF 7 |
| MFG. APPR. | RF  | TITLE   | SCALE        |
| APPROVED   | RF  | WEARPLATE ASSY  | NTS          |
| DE APPR.   | RF  | COPYRIGHT © 2009 BY DART AEROSPACE USA, INC.  |              |
| DATE       | 09.06.30  | THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC. |              |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

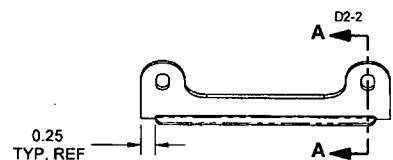
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

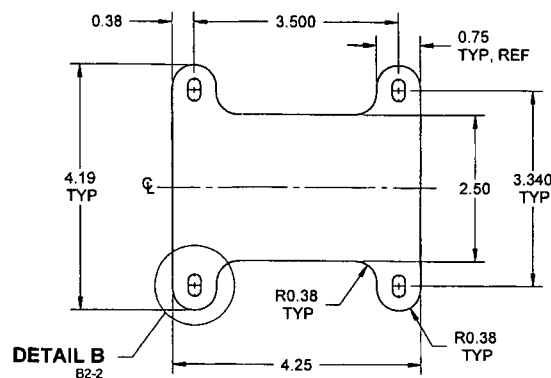
| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

NOTE: Date & initial all entries

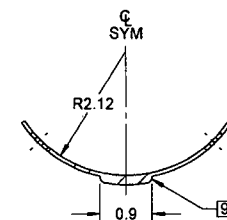
51822



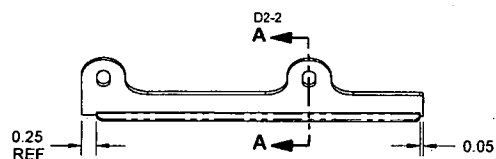
**D3847-1 WEARPAD**  
MADE FROM D3847-1F FLAT PATTERN



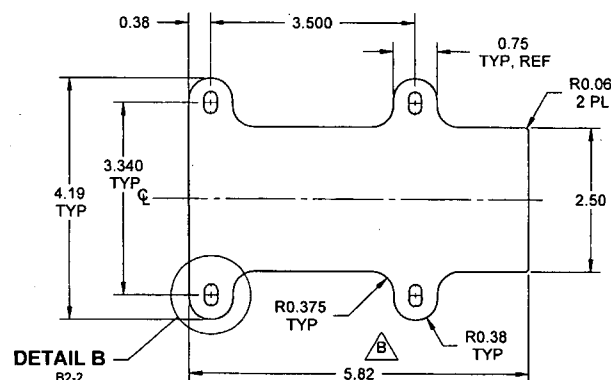
**D3847-1F FLAT PATTERN**



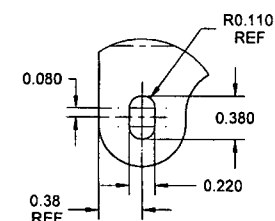
**SECTION A-A** D7-2 B7-2



**D3847-11 WEARPAD**  
MADE FROM D3847-11F FLAT PATTERN



**D3847-11F FLAT PATTERN**



**DETAIL B** C5-2 B5-2  
TYP, SCALE 2X

**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL PER AMS 5513 OR AMS 5524, 16 GAUGE (0.063 THICK). (REF. DART SPEC. M304S16GA)
- 2) FINISH: POWDER COAT "GREY SANDTEX" (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3847-X" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT:  
D3847-1 = 0.03 lbs  
D3847-11 = 0.47 lbs
- 8) WELD PER QSI 004
- 9) APPLY 2 LAYERS OF 2059B HARDCOAT WELDS TO WITHIN 0.25 OF WEARPAD ENDS 0.19 TO 0.25 THICK UNLESS OTHERWISE INDICATED

**RELEASED**  
12/27/15

|            |                    |   |              |
|------------|--------------------|---|--------------|
| DESIGN     | RF                 | <b>DART AEROSPACE USA, INC.</b>   |              |
| DRAWN      | RF                 | PORT HADLOCK, WA  |              |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.   | REV. B       |
| MFG. APPR. | <i>[Signature]</i> | D3847   | SHEET 2 OF 7 |
| APPROVED   |                    | TITLE   | SCALE        |
| DE APPR.   | <i>[Signature]</i> | WEARPLATE ASSY  | NTS          |
| DATE       | 09.06.30           | <small>COPYRIGHT © 2009 BY DART AEROSPACE USA, INC.<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small> |              |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

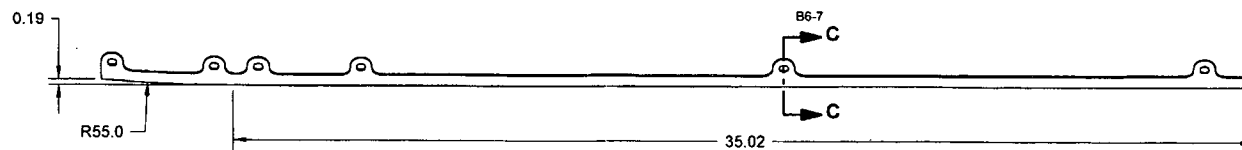
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

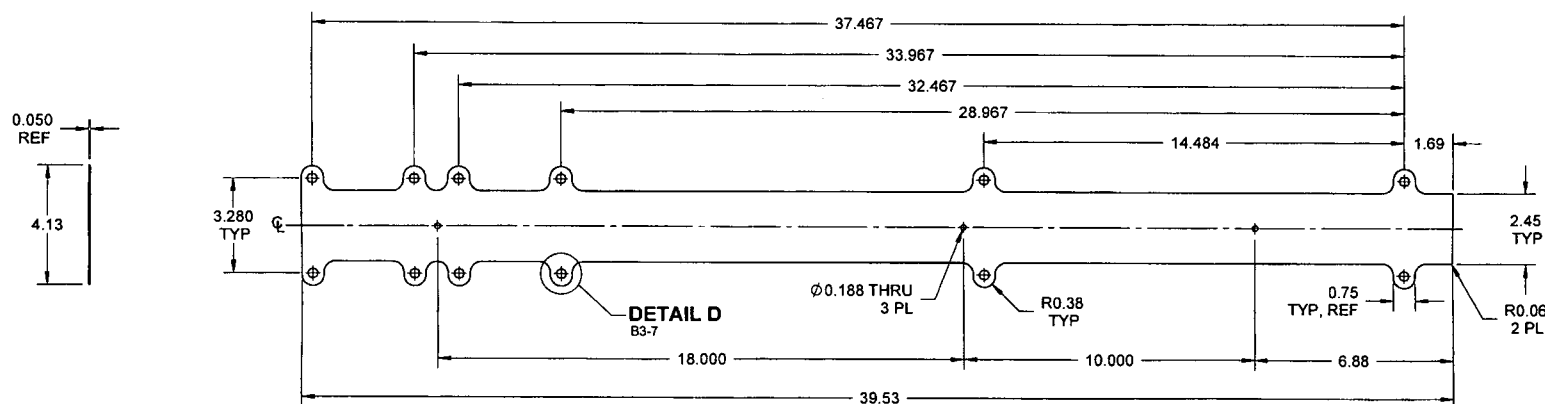
| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

51822



**D3847-3 PLATE**  
MADE FROM D3847-3F FLAT PATTERN



**D3847-3F FLAT PATTERN**

**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL PER AMS 5513 OR AMS 5524, 18 GAUGE (0.050 THICK), (REF: DART SPEC. M304S18GA)
- 2) FINISH: POWDER COAT "GREY SANDTEX" (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.46 lbs

|            |           |   |              |
|------------|-----------|---|--------------|
| DESIGN     | RF        | <b>DART AEROSPACE USA, INC.</b>   |              |
| DRAWN      | RF        | PORT HADLOCK, WA  |              |
| CHECKED    | <i>PH</i> | DRAWING NO.   | REV. B       |
| MFG. APPR. | <i>E</i>  | D3847   | SHEET 3 OF 7 |
| APPROVED   |           | TITLE   | SCALE        |
| DE APPR.   | <i>A</i>  | WEARPLATE ASSY  | NTS          |
| DATE       | 09.06.30  | <small>COPYRIGHT © 2005 BY DART AEROSPACE USA, INC.<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small> |              |

**RELEASED**  
29/07/13



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

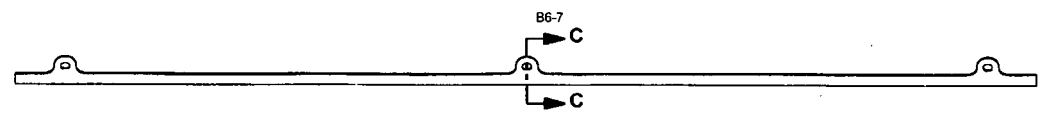
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

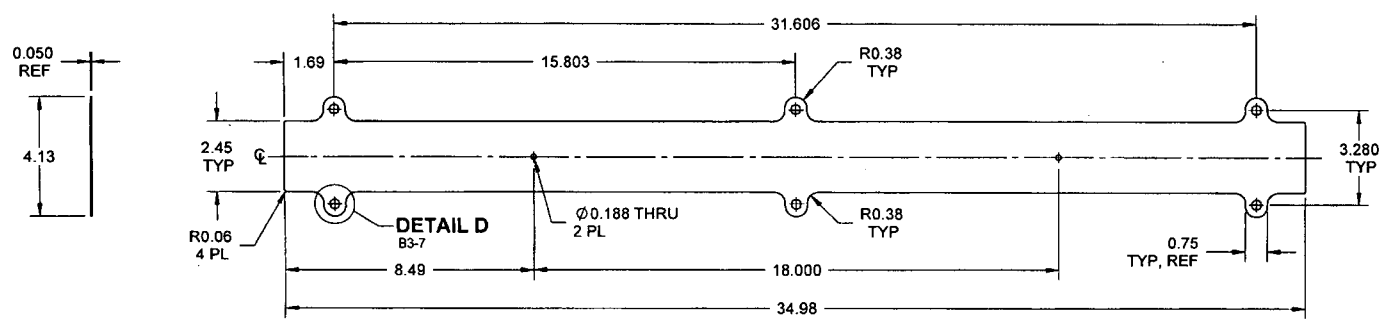
| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

51822



**D3847-5 PLATE**  
MADE FROM D3847-5F FLAT PATTERN



**D3847-5F FLAT PATTERN**

**RELEASED**  
9/6/15

**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL PER AMS 5513 OR AMS 5524, 18 GAUGE (0.050 THICK), (REF. DART SPEC. M304S18GA)
- 2) FINISH: POWDER COAT "GREY SANDEXT" (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.29 lbs

|            |           |   |              |
|------------|-----------|---|--------------|
| DESIGN     | RF        | <b>DART AEROSPACE USA, INC.</b>   |              |
| DRAWN      | RF        | PORT HADLOCK, WA  |              |
| CHECKED    | <i>RF</i> | DRAWING NO. <b>D3847</b>  | REV. B       |
| MFG. APPR. | <i>RF</i> | TITLE   | SHEET 4 OF 7 |
| APPROVED   | <i>RF</i> | SCALE   | NTS          |
| DE APPR.   | <i>RF</i> | <b>WEARPLATE ASSY</b>   |              |
| DATE       | 09.06.30  | <small>COPYRIGHT © 2005 BY DART AEROSPACE USA, INC.<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small> |              |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

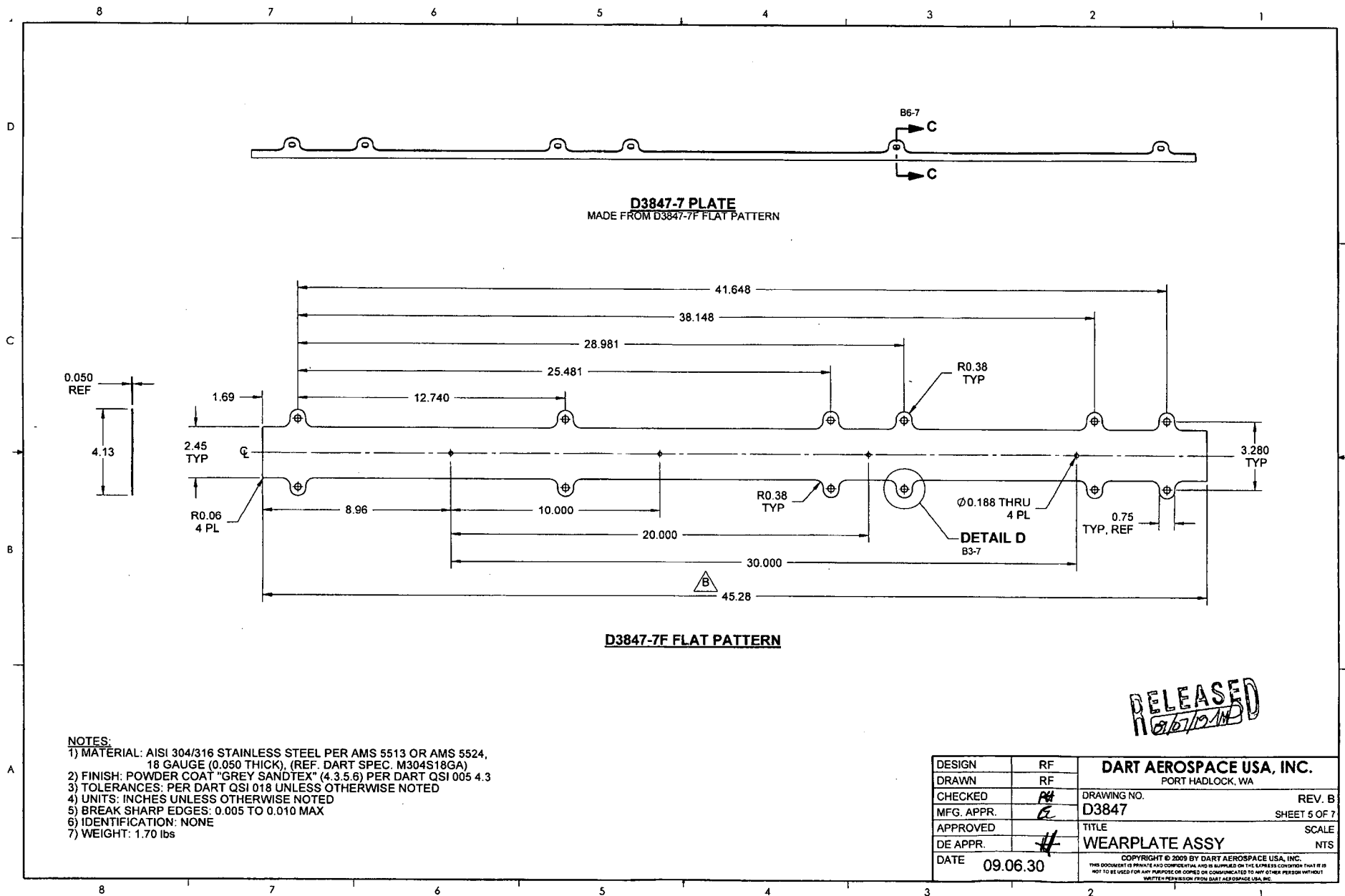
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

51822



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

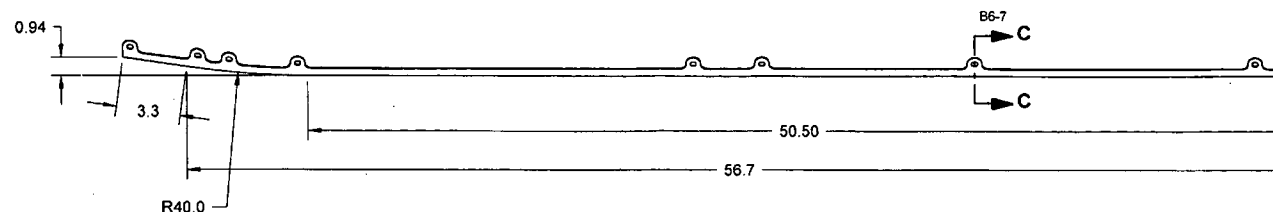
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

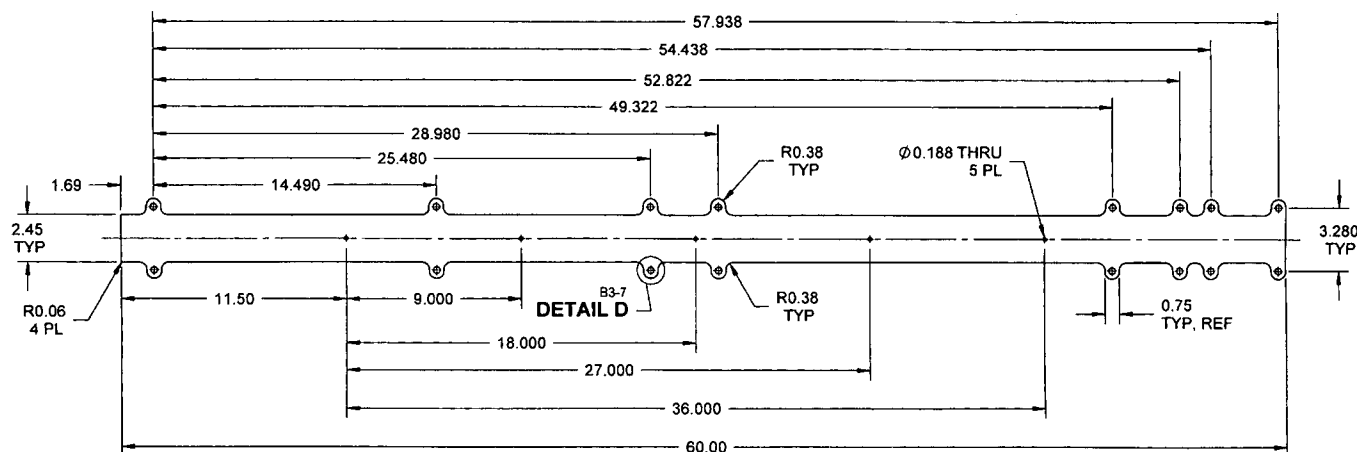
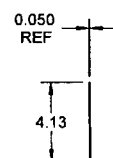
| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

51822



**D3847-9 PLATE**  
MADE FROM D3847-9F FLAT PATTERN



**D3847-9F FLAT PATTERN**

**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL PER AMS 5513 OR AMS 5524, 18 GAUGE (0.050 THICK), (REF. DART SPEC. M304S18GA)
- 2) FINISH: POWDER COAT "GREY SANTEX" (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 3.86 lbs

|   |          |  |              |
|---|----------|--|--------------|
| DESIGN  | RF       | <b>DART AEROSPACE USA, INC.</b>              |              |
| DRAWN   | RF       | PORT HADLOCK, WA                             |              |
| CHECKED   | RF       | DRAWING NO.                                  | REV. B       |
| MFG. APPR.  | E        | D3847  | SHEET 6 OF 7 |
| APPROVED  |          | TITLE  | SCALE        |
| DE APPR.  | #        | WEARPLATE ASSY                               | NTS          |
| DATE  | 09.06.30 | COPYRIGHT © 2005 BY DART AEROSPACE USA, INC. |              |
| THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC. |          |  |              |

**RELEASED**  
09/06/2005

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

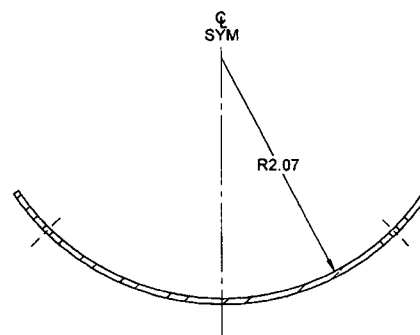
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

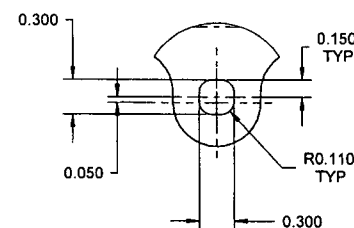
| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

NOTE: Date & initial all entries

51822



**SECTION C-C**  
SCALE 4X  
D4-3  
D4-4  
D3-5  
D3-6



**DETAIL D**  
TYP, SCALE 4X  
B5-3  
B6-4  
B3-5  
B5-6

RELEASED  
29/07/15 MJD

|            |           |   |              |
|------------|-----------|---|--------------|
| DESIGN     | RF        | <b>DART AEROSPACE USA, INC.</b><br>PORT HADLOCK, WA   |              |
| DRAWN      | RF        |   |              |
| CHECKED    | <i>RF</i> | DRAWING NO.   | REV. B       |
| MFG. APPR. | <i>EE</i> | D3847   | SHEET 7 OF 7 |
| APPROVED   |           | TITLE   | SCALE        |
| DE APPR.   | <i>H</i>  | WEARPLATE ASSY  | NTS          |
| DATE       | 09.06.30  | <small>COPYRIGHT © 2009 BY DART AEROSPACE USA, INC.<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS<br/>NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT<br/>WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small> |              |



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries